



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBW6705G02231-3G

Job Sheet 170178



Part No: RBW6705G02231-3G

Job Qty: 4 ea

Part Name: Rigging Pin Assembly N3



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/11/18

Job Tracking No:

Due Date: 1/31/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: IPP Rev.A New Issue 17/11/06 JFS Verified by:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea		1/2/18	0.00	0.00	Start Up Machining		MLL
100	Small Fab	4 pcs		1/2/18	0.00	1.33	Small Fab-9		MLL DAS
110	QC	4 pcs		1/2/18	0.00	0.00	QC5		38 18-02-07
115	Mill Conv	4 pcs		1/3/18	0.00	0.67	Mill Conv 1		DAS 9-89
118	QC	4 pcs		1/3/18	0.00	0.00	QC5		38
120	Outsource	4 pcs		1/17/18			MEI001-VC	10/13	AP 9-89 12/06
130	Outsource	4 pcs		1/30/18			GRO002-VC	10	At 18/03/05
140	Packaging	4 pcs		1/30/18	0.00	0.00	Packaging2		AP 18/03/05
150	QC	4 pcs		1/30/18	0.00	0.00	QC6		38
160	Small Fab	4 pcs		1/31/18	0.00	0.67	Small Fab		MLL 9-89 DAS
170	QC	4 pcs		1/31/18	0.00	0.00	QC5		38
190	Packaging	4 pcs		1/31/18	0.00	0.00	Packaging3		9-89
200	QC21-SA	4 Ea		1/31/18	0.00	0.00	QC21		MAR 12 2018

Part Op 100 - 1- Cut rod to 4.625" 2- Bend as per dwg. 3- Cut rod to Finished length as per dwg. 4- Grind chamfer.
Descriptions: 115 - DRILL HOLE AS PER DWG AND DEBURR

120 - 1--Issue P/O to Metcore ; P/O 038999 RC: 26-30 2-Bead blast 3- Certificate of Conformity is required

NOTE DROP SHIP TO FINISHER To ship directly to Groupe Altech

130 - -Issue P/O to Groupe Altech: P/O 39002 -Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required

140 - C of C is required.

160 - - Install lanyard as per dwg.

170 - Black ink stamp T/N on flag to fit as per DWG.

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	8893K204 5031235	2	6	0	0
160-Small Fab	3896T31	8	296	0	0
	CL-2-C	4	525	0	0
	NAS1756-12	4	182	0	0

Part Specifications

Specifications could not be found.

DART
AEROSPACE
S037034

Dart Aerospace Ltd.

1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com



Rigging Pin Assembly N3

PART NO: RBW6705G02231 – 3G

Original Serial #: S037034

Revision:

Operation: Start up Operation 01/30/18

Change No:

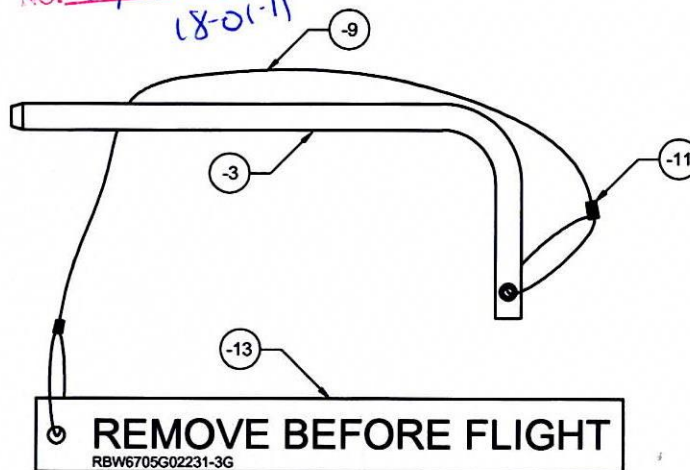
Job No: 170178

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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL
A	CORRECTED BOM -3 FROM #3/16 PER RW.	4/25/11	RJC
1	DELETED -1 WELDMENT, -5 AND -7. EXTENDED PIN SHORT END FROM 1.62 TO 2.04 ADDED .094 HOLE FOR LANYARD.	4/25/11	RJC
2	-3 CH'D BEND RADIUS WAS R .56 IS R .50. UDATED BOM QUANTITIES.	2/12/13	BIM

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 170178MCS
18-01-11

TEO ATTACHED



BLACK INK STAMP TOOL No. ON FLAG TO FIT.

NOTES

1. ALSO PART OF KIT RBW6705G00131-3G.

ASSY QTY	ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	MATERIAL	B/O INFORMATION OR SPECIFICATIONS	Pg.
			-3	1	PIN N°3	O-1	Ø1/4 x 6-7/16 MCMaster-CARR #8893K36	2
		B/O	-9	1	LANYARD WIRE	COATED STEEL	Ø1/16 x 10 REID #CL2C	1
		B/O	-11	2	FERRULE	ALUMINUM	Ø1/16 x 3/8 MCMaster-CARR #3896T31	1
		B/O	-13	1	REMOVE BEFORE FLIGHT FLAG	COATED CLOTH	NAS1756-12 AIRCRAFT HARDWARE	1

RED BARN MACHINE	
TITLE RIGGING PIN ASSY. N° 3	
DWG NO. RBW6705G02231-3G	REV 2
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 FRACTIONS ± 1/32 ANGLES ± 5°	
DRAWN BY: PERRITT APPROVED: <i>D. Pitt</i> HEAT TREAT FINISH SPEC	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 1-28-10 SHEET 1 of 2

 DART AEROSPACE Hawkesbury, Ontario, Canada	ENGINEERING ORDER # TEO17-650			SCALE: NTS	SHEET 1 OF 1
	DRAWING NO. RBW6705G02231-3G	REV: 2	EFF.: NEXT ORDER	CHANGE CATEGORY	
	TITLE: RIGGING PIN ASSY # 3			☐ MAJOR ☒ MINOR	
	APPROVED: WM 10/09/2017 			MFG. APPR.: DP 09/26/2017	CHECKED: SAC 09/25/2017
TRANSACTION CODE (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: WRONG McMaster PART #			COPYRIGHT © 2017 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

WAS : RBW6705G02231-3G-3 REV 2 : McMaster#8893K36

IS: RBW6705G02231-3G-3 REV 2 : McMaster#8893K204

DOCUMENTS EFFECTED: ☐ PATTERN ☐ INSTALL INSTRUCTIONS ☒ BOM



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038999

Drop Ship
to Groupe Altech PO 39002

Supplier: MEI001-VC
Metcor Inc.
560 Boul. Arthur Sauve
Saint-Eustache
QC
J7R 5A8 Canada
Phone: 450 473 1884
Fax: 450 491 5498

PO No: PO038999
PO Date: 2/8/18
Due Date: 2/13/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Baker, Diane
Phone: dbaker@dartaero.com

E-MAILED
FEB-13-2018

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items				Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
Line Item	Job	Part	Description							
1	170907	C3-12-1	Lock Bushing 1-Issue P/O to Metcore ; P/O _____ HEAT TREAT TO T4/T42 CONDITION MIN. UTS=30 KSI (60 HREW MIN) NOTE: DETAIL C OF C REQUIRED Part made from 4140 Round Bar 750 Metcore to ship directly to Groupe Altech	Firmed	2/13/18	40 pcs	0 pcs	40 pcs	\$7.50/pcs	\$300.00
2	170175	RBW6705G02131-3G	Rigging Pin Assembly N2 1--Issue P/O to Metcore ; P/O _____ RC: 26-30 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER To ship directly to Groupe Altech Part made from 01R Tool Steel Ship Directly to Group Altech	Firmed	2/13/18	6 pcs	0 pcs	6 pcs	\$25.00/pcs	\$150.00
3	170178	RBW6705G02231-3G	Rigging Pin Assembly N3 1--Issue P/O to Metcore ; P/O _____ RC: 26-30 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER To ship directly to Groupe	Firmed	2/13/18	4 pcs	0 pcs	4 pcs	\$25.00/pcs	\$100.00



Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO038999

Items									
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)
4	170181	RBW6705G02331-3G	Altech Part made from 01R Tool Steel Rigging Pin Assembly N4 1--Issue P/O to Metcore ; P/O _____ RC: 26-30 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER To ship directly to Groupe Altech Part made from 01R Tool Steel	Firmed	2/13/18	2 pcs	0 pcs	2 pcs	\$25 00/pcs
									\$50 00
5	171452	D4202-1	Spacer HEAT TREAT TO T4/T42 CONDITION MIN UTS=30 KSI (60 HREW MIN) NOTE: DETAIL C OF C REQUIRED Part made from 6061-T6 Round Tube 500x.058W	Firmed	2/13/18	500 pcs	0 pcs	500 pcs	\$1 21362/pcs
									\$606 81
6	168221	646 3014	Blade FINISH HEAT TREAT TO 58-62 RC ROCKWELL HARDNESS PART ARE MADE FROM AISI A2 TOOL STEEL	Firmed	2/13/18	11 pcs	0 pcs	11 pcs	\$28 41/pcs
									\$312 51
7	170289	D5518-1	Crossbolt Spacer PO to Metcor. HEAT TREAT TO T4/T42 CONDITION MIN UTS=30 KSI (60 HREW MIN) NOTE: DETAIL C OF C REQUIRED PART ARE MADE FROM 6061-T6 MATERIAL	Firmed	2/13/18	50 pcs	0 pcs	50 pcs	\$1 21362/pcs
									\$60 68
Grand Total:									\$1,580.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

Certificat de Conformité Détaillé

Detailed Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
325329	1

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

GROUP ALTECH

2455 ALPERN

ST LAURENT

QC H4S1N9

1

COMMANDE DU CLIENT customer po	CLASSIFICATION PIECE part classification	MATÉRIEL material	MAÎTRE D'OEUVRE prime contractor	PROGRAM
38999	N/A	O1		
<u>SPÉCIFICATIONS DU PROCÉDÉ</u> processing specifications				
SEL HARDEN				
HARDEN AND TEMPER				
EXIGENCE / requirement	SPÉCIFICATIONS / specified TESTS EXÉCUTÉS / performed		RÉSULTATS DE TESTS / results	
HARDNESS	26 - 30 HRC		12	26 - 28 HRC
QUANTITÉ quantity	POIDS weight	DESCRIPTION DES PIÈCES parts description		
12	1	RBW6705G02131-3G (6) RBW6705G02131-3G JOB.170175 (4) RBW6705G02231-3G JOB 170178 (2) RBW6705G02331-3G JOB 170181 1 BOITE DE CARTON		

COMMENTAIRES / comments

SALT HARDEN 1475F, 20MIN

TEMPER 1100F, 2HRS

RE-TEMPER 1150F, 2HRS

Toutes les opérations de TT ont été faites en conformité avec les requis de la spécification demandée et toutes les vérifications et les tests demandés ont été faites et documentés. Aucun changement n'a été faite par rapport au TT. On certifie que le matériel a été fabriqué, échantillonné, testé et inspecté en accord avec les spécifications du matériel et le bon de commande et le matériel rencontre les exigences spécifiées.

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Heat treatment (HT) was performed with equipment that meets the requirements of requested specification.

All HT operations were performed in compliance with the required HT specification and all verifications have been performed and documented. No unauthorized changes were performed in regards to the HT. We certify that the material was manufactured, sampled, tested and inspected in accordance with the material specification and the purchase order and was found to meet the requirements.

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Vincent Caron



23 FEB 2018



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO039002

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO039002

PO Date: 2/9/18

Due Date: 3/7/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Baker, Diane
Phone: dbaker@dartaero.com

Revised
8

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments:

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	170907	C3-12-1	Lock Bushing ISSUE P/O TO GROUPE ALTECH: QQ-N-290, CLASS 2 GRADE E OR F. NICKEL PLATE TO .0004-.0006 C OF C IS REQUIRED	Firmed	2/16/18	40 pcs	0 pcs	40 pcs	\$3.00/pcs	\$120.00
2	170175	RBW6705G02131-3G	Rigging Pin Assembly N2 -Issue P/O to Groupe Altech: P/O _____ -Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required	Firmed	2/16/18	6 pcs	0 pcs	6 pcs	\$7.50/pcs	\$45.00
3	170178	RBW6705G02231-3G	Rigging Pin Assembly N3 -Issue P/O to Groupe Altech: P/O _____ -Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required	Firmed	2/16/18	4 pcs	0 pcs	4 pcs	\$7.50/pcs	\$30.00
4	170181	RBW6705G02331-3G	Rigging Pin Assembly N4 -Issue P/O to Groupe Altech: P/O _____ -Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required	Firmed	2/16/18	2 pcs	0 pcs	2 pcs	\$7.50/pcs	\$15.00
Grand Total:										\$210.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)



Certificat de Conformité / Certificate of Compliance

(007054-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

007054- 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By		Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.			
28-Feb-2018		Aman Kaur				039002			
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order	
1	C3-12-1 Rev.	C3-12-1 01 -E-NIC STEEL 500 [E-NICKEL STEEL 500]	E-NICKEL-500 CH	40	40	0	0	0	
2	RBW6705G02131-3G Rev.	RBW6705G02131-3G ZINC-CLEAR ASTM B633, TYPE 1, SC2 C OF C REQUIRED	ZINC CH	6	6	0	0	0	
3	RBW6705G02231-3G Rev.	RBW6705G02231-3G ZINC-CLEAR ASTM B633, TYPE 1, SC2 C OF C REQUIRED	ZINC CH	4	4	0	0	0	
4	RBW6705G02331-3G Rev.	RBW6705G02331-3G ZINC ASTM B633 TYPE 1, SC2 C OF C REQUIRED	ZINC CH	2	2	0	0	0	

DAS
38
9-89

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements
 Our financial and legal responsibility will not be higher than the amount of invoice